

**Notice of Allowability**

Application No.

10/700,124

Examiner

Siu M. Lee

Applicant(s)

FRAHM ET AL.

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 7/11//2007.
2. ☒ The allowed claim(s) is/are 1-5 and 11-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                                |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____  |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Trevor Joike on 9/20/2007.

Replace claims 1-3 with the following:

(1) Regarding claim 1:

1. A method of per-correcting a DTV translator for distortion produced by a high power amplifier and emission mask filter of the DTV translator, the DTV translator having a receiver and a transmitter, the method comprising:

coupling an output of the high power amplifier and emission mask filter to the receiver;

tuning the receiver from a frequency at an input of the DTV translator to a different frequency at the output of the high power amplifier and emission mask filter so that the receiver determines a compensation of the distortion produced by the high power amplifier and emission mask filter of the DTV translator in response to the tuned signal; and

transferring the compensation of the distortion from the receiver to the transmitter so as to pre-correct the DTV translator for the distortion.

(2) Regarding claim 2:

2. The method of claim 1 further comprising de-coupling the receiver and the transmitter during the coupling of an output of the high power amplifier and emission mask filter to the receiver and the tuning of the receiver to the output of the high power amplifier and emission mask filter.

(3) Regarding claim 3:

3. The method of claim 1 wherein the receiver includes an equalizer, wherein the transmitter includes a pre-equalizer, wherein the tuning of the receiver to the output of the high power amplifier and emission mask filter comprises tuning the receiver to the output of the high power amplifier and emission mask filter such that the equalizer adapts to the tuned signal, and wherein the transferring of the compensation of distortion from the receiver to the transmitter comprises transferring tap values from the equalizer to the pre-equalizer.

### ***Allowable Subject Matter***

2. Claims 1-5, 11-28 is allowed.

3. The following is an examiner's statement of reasons for allowance:

The present invention describes a DTV translator that coupling an output of the high power amplifier and emission mask filter to the receiver; tuning the receiver from a frequency at an input of the DTV translator to a different frequency at the output of the

Art Unit: 2611

high power amplifier and emission mask filter so that the receiver determines a compensation of the distortion produced by the high power amplifier and emission mask filter of the DTV translator in response to the tuned signal; and transferring the compensation of the distortion from the receiver to the transmitter so as to pre-correct the DTV translator for the distortion. The closest prior art, Seo et al. (US 2004/0008764 A1) describes a similar system but fails to disclose the transferring of the compensation of the distortion from the receiver to the transmitter so as to pre-correct the DTV translator from the distortion. This distinct features has been added to the independent claims 1, 11, 19, and 25, thus rendering them allowable

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Siu M. Lee whose telephone number is (571) 270-1083. The examiner can normally be reached on Mon-Fri, 7:30-4:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Siu M Lee  
Examiner  
Art Unit 2611  
9/20/2007

A handwritten signature in black ink, appearing to read "Chieh M. Fan", with a stylized flourish at the end.

CHIEH M. FAN  
SUPERVISORY PATENT EXAMINER